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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10, 12, 14, 18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "laundry index" is not well known in the art, as there is no information related to this context is found. Therefore, one ordinary skill in the art would not know what a laundry index. Applicant briefly describes " a laundry index included in the relevant weather forecast information" (page 44 of the specification, lines 22-25). However, it is not clear what data is included in the laundry index.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

Claims 1, 3, 7, 8, 9, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyer et al (US 6,268,849), Manson et al (US 6,543,051), and Tsuyoshi Megata (JP363200689).

Claims 1,3,7,8,9,13 are drawn to a recording/viewing support apparatus for supporting recording or viewing a program selected by a user as a desired program from among programs scheduled to be aired as digital broadcasts, said apparatus comprising the following limitations:

- Program specifying information obtaining means for obtaining program specifying information that specifies said desired program based on an operation by said user (claim 1);
- Weather forecast information obtaining means for obtaining, based on said program specifying information, weather forecast information for relevant weather at a location where said digital broadcast is received during a broadcast time period of said desired program as relevant weather forecast information (claim 1, claim 7);
- Determining means for determining, based on said relevant weather forecast information, whether said relevant weather will be so bad or not as to degrade said desired program in image quality or sound quality (claim 1);
- Notifying means for giving, when said determining means determines that said relevant weather will be bad, a notice of a

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possibility of degradation in image quality or sound quality of said desired program.(claim 1)

- Receiving means for receiving said digital broadcast and generating a transport stream; program information displaying means for displaying a program list based on program sequence information included in said transport stream; and input operation means, operated by the user for selecting said desired program from among programs shown in said program list, for obtaining said program specifying information based on the operation by said user (claim 3).
- weather forecast information obtaining means includes interfacing means for accessing to the Internet, and obtains, through the interfacing means, said relevant weather forecast information via the Internet (claim 8).
- A probability of precipitation included in said relevant weather forecast information is larger than a predetermined value, said determining means determines that said relevant weather will be so bad as to degrade said desired program in image quality or sound quality (claim 9).
- Storing means for storing correlation data that relates a probability of precipitation to a receive level degradation probability defined as a probability at which a receive level of said digital broadcast

becomes smaller than a predetermined level threshold value (claim 11 and 13).

- wherein said determining means calculates, based on said correlation data, the receive level degradation probability corresponding to the probability of precipitation included in said relevant weather forecast information and, when the calculated receive level degradation probability is larger than a predetermined probability threshold value, determines that said relevant weather will be so bad as to degrade said desired program in image quality or sound quality (claim 11).

Boyer et al teach a recording/viewing support apparatus for supporting recording or viewing a program selected by a user as a desired program from among programs scheduled to be aired as digital broadcasts, said apparatus comprising:

- Program specifying information obtaining means for obtaining program specifying information that specifies said desired program based on an operation by said user (e.g. column 5, lines 45-67 and column 7, lines 54-62, user obtains weather information through various web pages);
- Receiving means for receiving said digital broadcast and generating a transport stream (e.g. column 2, lines 43-57); program information displaying means for displaying a program list based on

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program sequence information included in said transport stream (e.g. column 2, lines 25-28); and input operation means, operated by the user for selecting said desired program from among programs shown in said program list, for obtaining said program specifying information based on the operation by said user (e.g. column 7, lines 54-62).

- Weather forecast information obtaining means includes interfacing means for accessing to the Internet, and obtains, through the interfacing means, said relevant weather forecast information via the Internet (e.g. column 7, lines 54-62).
- Storing mean for storing television programming information (e.g. column 4, lines 1-7).

However, Boyer et al fail to teach the following:

- Determining means for determining, based on said relevant weather forecast information, whether said relevant weather will be so bad or not as to degrade said desired program in image quality or sound quality; and
- Notifying means for giving, when said determining means determines that said relevant weather will be bad, a notice of a possibility of degradation in image quality or sound quality of said desired program

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- A probability of precipitation included in said relevant weather forecast information is larger than a predetermined value, said determining means determines that said relevant weather will be so bad as to degrade said desired program in image quality or sound quality.
- correlation data that relates a probability of precipitation to a receive level degradation probability defined as a probability at which a receive level of said digital broadcast becomes smaller than a predetermined level threshold value,
- wherein said determining means calculates, based on said correlation data, the receive level degradation probability corresponding to the probability of precipitation included in said relevant weather forecast information and, when the calculated receive level degradation probability is larger than a predetermined probability threshold value, determines that said relevant weather will be so bad as to degrade said desired program in image quality or sound quality.

Tsuyoshi Megata discloses:

- Determining means for determining, based on said relevant weather forecast information, whether said relevant weather will be so bad or not as to degrade said desired program in image quality or sound quality; and

- Notifying means for giving, when said determining means determines that said relevant weather will be bad, a notice of a possibility of degradation in image quality or sound quality of said desired program
- A probability of precipitation included in said relevant weather forecast information is larger than a predetermined value, said determining means determines that said relevant weather will be so bad as to degrade said desired program in image quality or sound quality.
- Correlation data that relates a probability of precipitation to a receive level degradation probability defined as a probability at which a receive level of said digital broadcast becomes smaller than a predetermined level threshold value,
- Wherein said determining means calculates, based on said correlation data, the receive level degradation probability corresponding to the probability of precipitation included in said relevant weather forecast information and, when the calculated receive level degradation probability is larger than a predetermined probability threshold value, determines that said relevant weather will be so bad as to degrade said desired program in image quality or sound quality.

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(please see e.g. English translation of the abstract, page 4-7 of the English translation attached).

It would have been obvious for one ordinary skill in the art at the time of the invention was made to combine the teachings of Boyer et al and Tsuyoshi Megata to provide a television program guide to display a message when the signal level decreases due to rain-fall attenuation and indicating that the quality of the received video image is much deteriorated because of rain-fall attenuation at the time of rain-fall attenuation occurrence (Tsuyoshi Megata, page 4 and page 5 of the English translation).

Both Boyer et al and Tsuyoshi Megata fails to disclose weather forecast information obtaining means for obtaining, based on said program specifying information, weather forecast information for relevant weather at a location where said digital broadcast is received during a broadcast time period of said desired program as relevant weather forecast information.

Manson et al teach weather forecast information obtaining means for obtaining, based on said program specifying information, weather forecast information for relevant weather at a location where said digital broadcast is received during a broadcast time period of said desired program as relevant weather forecast information (e.g. abstract, and column 1, lines 19-21, weather forecast information: emergency alert message); It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Manson et al into the teaching of Boyer et al and

Tsuyoshi Megata to provides a cost saving to the system operators by allowing the modification of existing equipment, rather than requiring the purchase of new digital equipment (Manson et al, column 3, lines 45-67).

Claims 2, 4, 5, 15-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyer et al (US 6,268,849), Manson et al (US 6,543,051), and Tsuyoshi Megata (JP363200689) as applied to claims 1, 3, 7, 8, 9, 11, and 13 above, and further in view of Bottomley et al (US 5,508,732).

Claims 2, 4, 5, 15-17 and 19 are drawn to a recording/viewing support apparatus for supporting recording or viewing a program selected by a user as a desired program from among programs scheduled to be aired as digital broadcasts, said apparatus comprising the following limitations:

- Searching means for searching for a same program to be aired at different time, which is a program that is equal in content to said desired program and is scheduled to be aired in a time period different from the broadcast time period of said desired program;
- Same program information displaying means for displaying; information that specifies said same program to be aired at different time found by said searching means.

Boyer et al teach Searching means for searching the programming to be air (e.g. column 7, lines 53-65); displaying means for displaying television program listings with embedded real time data (e.g. column 2, lines 24-28). However, Boyer et al fail to teach

the same program to be aired at different time, which is a program that is equal in content to said desired program and is scheduled to be aired in a time period different from the broadcast time period of said desired program. Neither Manson et al nor Tsuyoshi Megata teaches this. Bottomley et al disclose the same program can be aired at different time (column 10, lines 12-13). It would have been obvious at the time the invention was made to combine the teaching disclosed by Bottomley et al and the teaching disclosed by Boyer et al, Manson et al and Tsuyoshi Megata for the same reason disclosed by Bottomley et al, which is to provide a broadcast medium where the consumer is not locked into a time schedule which is predetermined by the service packager (Bottomley et al, column 1, lines 41-44).

Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boyer et al (US 6,268,849), Manson et al (US 6,543,051), Tsuyoshi Megata (JP363200689), and Bottomley et al (US 5,508,732) as applied to claims 1-5, 7-9, 11, 13, 15-17, and 19 above, and further in view of Kim et al (US 6,549,905 B1).

Claim 6 is drawn to searching means searches not only digital broadcast programs but also analog broadcast programs for said same program to be aired at different time.

Boyer et al disclose the recording/viewing support apparatus according to claim 2, wherein said searching means searches the program guide listings (e.g. abstract, and column 5, line 40-58). However, Boyer et al fail to specify neither the digital


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broadcast programs nor the analog broadcast programs. Mason et al, Tsuyoshi Megataand, and Bottomley et al fail to specify this. Kim et al disclose a searching means searches not only digital broadcast programs but also analog broadcast programs for said same program to be aired at different time (e.g. column 7, lines 3-8). It would have been obvious for one ordinary skill in the art at the time the invention was made to modify the teaching of Boyer et al, Mason et al, Tsuyoshi Megataand, and Bottomley et al with the teaching of Kim et al to provide a method for automatically searching information data on a television channel for user's convenience (Kim et al, column 2, lines 19-23).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571)270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Foley Shanon can be reached on (571)272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Daquan Zhao


Foley, Shanon
Supervisory Patent Examiner